

What is claimed is:

1. A liquid sorbent material comprising:
a plurality of first fibers forming a fiber component; and
plastic-containing bonding fibers, said fiber component bonded together by a
portion of the plastic of said plastic-containing bonding fibers.
2. The liquid sorbent material of claim 1, wherein said fiber component and the
plastic-containing bonding fibers are uniformly blended.
3. The liquid sorbent material of claim 1, wherein said plurality of first fibers
comprise inorganic fibers, organic fibers, or both.
4. The liquid sorbent material of claim 1, wherein said plurality of first fibers
comprise inorganic fibers comprising scrap rotary glass fibers, virgin rotary glass fibers,
or both.
5. The liquid sorbent material of claim 1, wherein said plurality of first fibers
comprise organic fibers comprising cleaned scrap cotton fibers, wood fibers, hemp fibers,
cellulose fibers, or a combination thereof.
6. The liquid sorbent material of claim 1, wherein said liquid sorbent material has a
substantially uniform density throughout its volume.
7. The liquid sorbent material of claim 6, wherein said density of the liquid sorbent
material is about 24 to 112 kg/m³.
8. The liquid sorbent material of claim 1, wherein said density of the liquid sorbent
material is about 32 to 64 kg/m³.

9. The liquid sorbent material of claim 1, wherein said liquid sorbent material has a gram weight of about 500 to 3600 gm/m².
10. The liquid sorbent material of claim 1, wherein the liquid sorbent material has a gram weight of about 600 to 3000 gm/m².
11. The liquid sorbent material of claim 1, wherein said liquid sorbent material has a thickness of about 6 to 89 mm.
12. The liquid sorbent material of claim 4, wherein said inorganic fibers have an average diameter of about 0.5 to 10 micrometers.
13. The liquid sorbent material of claim 4, wherein said inorganic fibers have an average diameter of about 1 to 7 micrometers.
14. The liquid sorbent material of claim 4, wherein said inorganic fibers have an average diameter of about 2 to 6 micrometers.
15. The liquid sorbent material of claim 4, wherein said inorganic fibers have an average length of no more than 1cm.
16. The liquid sorbent material of claim 4, wherein said inorganic fibers have an average length of about 2 to 3 mm.
17. The liquid sorbent material of claim 1, wherein said liquid sorbent material comprises about 2 to 50 wt. % of said plastic-containing bonding fibers.
18. The liquid sorbent material of claim 1, wherein said liquid sorbent material comprises about 5 to 30 wt. % of said plastic-containing bonding fibers.

19. The liquid sorbent material of claim 1, wherein said liquid sorbent material comprises about 10 to 20 wt. % of said plastic-containing bonding fibers.
20. The liquid sorbent material of claim 1, wherein said plastic-containing bonding fibers comprise bi-component fibers.
21. The liquid sorbent material of claim 20, wherein said bi-component fibers are sheath-core, side-by-side, island-in-the-sea, or segmented-pie cross-section type.
22. The liquid sorbent material of claim 20, wherein said bi-component fibers comprise:
 - a core material; and
 - a sheath material, wherein said sheath material has a melting point temperature lower than the melting point temperature of said core material.
23. The liquid sorbent material of claim 22, wherein said core material and said sheath material are both thermoplastic polymers.
24. The liquid sorbent material of claim 22, wherein said core material is a mineral and said sheath material is a thermoplastic polymer.
25. The liquid sorbent material of claim 22, wherein said core material and said sheath material are same thermoplastic polymer but of different formulations.
26. The liquid sorbent material of claim 1, wherein said plastic-containing bonding fibers comprise mono-component thermoplastic polymer fibers.
27. The liquid sorbent material of claim 1, further comprising a quantity of hydrophilic sorbent particles dispersed throughout the liquid sorbent material.
28. A method of making a liquid sorbent material, comprising the steps of:

opening bulk first fibers and bulk second plastic-containing bonding fibers;
blending said opened first fibers and said second plastic-containing bonding fibers
into blended fibers;
forming said fiber blend into a mat having a first side and a second side;
curing or heating said mat into said liquid sorbent material.

29. The method of claim 28, wherein said first fibers comprise inorganic fibers
comprising scrap rotary glass fibers, virgin rotary glass fibers, or both

30. The method of claim 28, wherein said step of opening further comprises a step of
weighing the opened fibers to monitor the feed rate of the opened fibers.

31. The method of claim 30, wherein said step of forming said fiber blend into said
mat further comprising continuously weighing said mat to ensure that said flow rate of
the blended fibers is at a desired rate.

32. The method of claim 31, further comprising a step of comparing the feed rate of
said opened fibers and the flow rate of said blended fibers in a feed back loop to control
the speed of said opening step.

33. The method of claim 28, wherein said curing or heating step comprises curing or
heating said mat at a temperature of less than about 200°C.

34. A method of absorbing a liquid spill, comprising:

- (a) providing a sorbent material comprising a plurality of inorganic fibers
uniformly blended and bonded by plastic-containing bonding fibers; and
- (b) contacting said sorbent material with said liquid spill, whereby said
sorbent material absorbs a quantity of said liquid.

35. The method of claim 34, wherein said liquid is oil.